## PATENT ABSTRACTS OF JAPAN

(11)Publication number:

06-277469

(43) Date of publication of application: 04.10.1994

(51)Int.Cl.

B01D 65/08

B01D 69/06

B01D 69/08

(21)Application number: 05-068405

(71)Applicant: KURITA WATER IND LTD

(22) Date of filing:

26.03.1993

(72)Inventor: SAWADA SHIGEKI

**IWASAKI KUNIHIRO** 

**OGOSE TSUTOMU** 

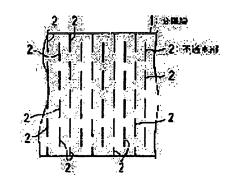
**ODA NOBUHIRO** 

## (54) MEMBRANE SEPARATION DEVICE

## (57)Abstract:

PURPOSE: To suppress the accumulation of a deposit on the surface of a separation membrane and to keep flux or a blocking ratio high over a long period of time by forming many local water impermeable parts on a separation membrane.

CONSTITUTION: A large number of elongated strip like water impermeable parts 2 are formed on a separation membrane 1 in a dispersed state. In the formation of the separation membrane 1, at first, a water impermeable agent is applied to the surface of a membrane and heat-treated to partially form impermeable areas on the surface of the membrane to be formed into a film. When a water impermeable material is woven, a film is formed on laminated support fabric. By forming the impermeable areas to a water permeable material for allowing the water transmitted from the membrane to flow down, only when the membrane and the water permeable material are



closely bonded at a time of pressure filtering, the impermeable areas are generated on the surface of the membrane coming into contact with the water permeable material positioned at impermeable areas. Since a large number of the local water impermeable parts 2 are formed on the surface of the separation